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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,614	03/15/2004	John Larry Sanders	30621-DIV5-CIP1	2613

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EXAMINER	
PEZZUTO, HELEN LEE	
ART UNIT	PAPER NUMBER
1713	

DATE MAILED: 09/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/708,614	SANDERS ET AL.	
	Examiner	Art Unit	
	Helen L. Pezzuto	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 July 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Applicant's amendment to claims 1, 9, 19, 26, in conjunction with the submission of new drawings, 131 Declarations, and Terminal Disclaimer on 7/20/05 are acknowledged. In response to said papers submitted, previous 112 rejection, drawing objection, 103 and double patenting rejection based on US 6,515,092 are hereby withdrawn.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 19 and claims dependent thereon are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The examiner fails to find expressive support for newly inserted

limitation of said polymer "being in intimate contact with said fertilizer product" at page 7, line 21.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 19 and claims dependent thereon are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The examiner fails to find the specific definition of the said polymer "being in intimate contact with said fertilizer product". What are the metes and bounds of "intimate contact"?

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen et al. (US-629) for the reasons of record and further in view of the following remarks.

US 3,265,629 to Jensen et al. discloses a method of coating solid particles, including fertilizers (col. 2, lines 36-42); col. 11, Example 7). Suitable coating employed includes aqueous solution of polymers containing both lipophilic and hydrophilic units, with the major percentage of the recurring units being hydrophilic (i.e. derived from dicarboxylic acids such as maleic acid and crotonic acid). Thus, water solubility is expected to be substantial as prior art uses a major percentage of hydrophilic monomers, and as further evident in using aqueous solution of the polymer coating. Other copolymerized units such as the instant itaconic acid, are also taught in minor amounts (col. 5, lines 57-72; col. 6, lines 5-12). Hence, the instant substantially water-soluble dicarboxylic acid polymer is suggested. The substantially water solubility of the resulting dicarboxylic polymer would be an inherent characteristic as the same monomeric units are used. In a preferred embodiment, the reference teaches hydrolyzed styrene-maleic anhydride copolymer containing a miner amount of other comonomer such as

itaconic acid, which encompass the instantly recited "at least two different moieties" and the first and second reactants. Prior art further suggest experimental control of the resultant polymer solubility via inclusion of suitable solubilizing agent (col. 6, lines 13-37). Hence, the degree of water solubility can be adjusted as taught. It is noted that even if the newly recited "being in intimate contact with said fertilizer product" is supported in applicant's disclosure (i.e. barring the 112 issues), prior art's inclusion of a lipid layer would still fall within the scope of "intimate contact", taken its broadest interpretation. Regarding the free radical means in obtaining the polymer, the examiner is of the position that these ethylenically unsaturated dicarboxylic acid monomers are known to polymerize via free radical mechanism. The selection of conventional initiator/catalyst used in free radical polymerization is obvious and would be readily envisaged by one skilled in the polymer art, barring any unexpected results. Accordingly, since the reference discloses a method of coating fertilizer employing a polymer comprising a major amount of hydrophilic monomers (i.e. maleic acid/anhydride, crotonic acid) and a minor amount of comonomers (i.e. itaconic acid), this teaching

makes the selection of at least two dicarboxylic monomers would be obvious and readily envisaged by one having ordinary skill in the art, motivated by the reasonable expectation of success in forming a coated fertilizer product as taught.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by JP-09-309785 (computer-translated copy herein provided).

JP-785 discloses a method of coating a monolayer on surface of a granular fertilizer. Prior art monolayer coating comprises a thermoplastic resin and up to 50 wt% of a water-soluble polymer. Preferred water-soluble polymer include unsaturated isobutylene-maleic anhydride copolymer [0016]-[0017], exist in a continuous phase within the coating. Thus, anticipating the present claims.

The examiner takes notice that the temperature units in applicant's specification remain in "EC" units. Applicants are advised check the electronic filed disclosure, and to make the necessary correction.

Double Patenting

1. Claims 1-2, 14, 18-19, and 31-32 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of copending Application No. 10/846,076. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant method of forming a combination in generic to and encompass the method of coating fertilizer in the co-pending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen L.

Pezzuto whose telephone number is (571) 272-1108. The examiner can normally be reached on 8 AM to 4 PM, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Helen L. Pezzuto
Primary Examiner
Art Unit 1713

hlp